# Transportation Value Pricing Projects in the United States<sup>1</sup>

# CONVERTING HIGH-OCCUPANCY VEHICLE (HOV) LANES TO HIGH-OCCUPANCY TOLL (HOT) LANES

"HOT" is the acronym for "High Occupancy/Toll". On HOT lanes, low-occupancy vehicles are charged a toll, while High-Occupancy Vehicles (HOVs) are allowed to use the lanes for free or at a discounted toll rate. HOT lanes create an additional category of eligibility for travelers wanting to use HOV lanes, since drivers can be eligible to use the facility either by meeting its minimum passenger requirement, or by choosing to pay a toll to gain access to the HOV lane.

Under SAFTEA-LU, HOV to HOT conversions were mainstreamed. This project type will now be implemented under 23 U.S.C. 166.

#### \*CALIFORNIA: HOT Lanes on I-15 in San Diego

**What:** San Diego's HOT Lanes were originally approved as part of the FHWA'S Congestion Pricing Pilot Program in ISTEA-1991.

**Where:** In the median between the junction of I-15 and SR 163 south and 1-15 and SR 56 junction north

Extension plan calls for 20 miles between SR 163 and SR 78 of 4 lanes in the median, moveable barrier, multiple access points, direct access ramps for buses and an eventual BRT lane.

**Method:** Initial pricing via collecting tolls via monthly permits with a decal in the window (December 1996); subsequently, the FasTrak® electronic toll collection system in use today was implemented in April 1998. Under this program, customers in single-occupant vehicles (SOVs) pay a toll each time they use the Interstate 15 HOV lanes. The unique feature of this program is that tolls vary dynamically with the level of congestion on the HOV lanes.

**Fees:** Fees can vary in 25-cent increments as often as every six minutes to help maintain free-flow traffic conditions on the HOV lanes. Motorists are informed of the toll rate changes through variable message signs located in advance of the entry points. The normal toll varies between \$0.50 and \$4.00. During very congested periods, the toll can be as high as \$8.00. Pricing is based on maintaining a LOS "C" for the HOT facility.

**Public Support:** San Diego Association of Governments (SANDAG) conducts periodic outreach to measure public response to the value pricing concept. These efforts have revealed broad support for managed/HOT lanes through the years. Equity was not perceived to be a major obstacle to implementing pricing on HOT lanes in the San Diego region.

Web Page: http://www.sandag.org/index.asp?projectid=34&fuseaction=projects.detail

#### CALIFORNIA: I-680 SMART Carpool Lanes in Alameda County

**What:** Examined options for the I-680 corridor and the feasibility study is complete. It concluded that the proposal to utilize the planned high-occupancy vehicle (HOV) lanes on Interstate 680 as high-occupancy toll (HOT) lanes is financially, operationally, and physically feasible. Project bid packages were in preparation in May of 2008.

<sup>&</sup>lt;sup>1</sup> Information culled from the FHWA Value Pricing Project Quarterly Reports – January through March 2008, http://ops.fhwa.dot.gov/tolling\_pricing/value\_pricing/pubs\_reports/guarterlyreport/grt1rpt08/index.htm

<sup>\*</sup> Projects funded by the FHWA Value Pricing Pilot Program

**Where:** Southbound HOV lane to a combined HOT facility on a 14-mile segment of I-680 in Alameda County, CA. The I-680 corridor connects employees in Southern Alameda County and the Silicon Valley with homes in the Tri-Valley, East Contra Costa County and the San Joaquin Valley.

**Who:** The Alameda County Congestion Management Agency (CMA) in collaboration with Santa Clara Valley Transportation Authority, Caltrans, and the Metropolitan Transportation Commission

**Public Support:** Environmental advocacy groups, business and labor organizations, and the metropolitan planning organization, Metropolitan Transportation Commission supports the project.

For More Information Contact: Jean Hart, Deputy Director, Alameda County Congestion Management Agency; Phone (510) 836-2560; Fax (510) 836-2185; E-mail: jhart@accma.ca.gov.

#### \*CALIFORNIA: HOT Lanes on I-880 in Alameda County Study

**What:** A study was done to determine whether excess capacity does exist, whether there is a market among potential users, and how to address the physical and operational issues associated with such a plan. Study results indicated that, while excess capacity exists, it is not sufficiently high to make local officials comfortable that additional priced vehicles could be accommodated. Also, the demand by light duty commercial vehicles was perceived as modest, and the

**Where:** Interstate 880 is a major congested freeway in Alameda County. Project is located on 17 miles of highway from just south of Oakland to Fremont. It connects the Port of Oakland and Oakland International Airport with high technology companies in Santa Clara and southern Alameda counties and with goods distribution centers to the east. This corridor has the highest volume of truck traffic in the region.

**Public Support:** California Highway Patrol expressed strong reservations about its ability to conduct effective enforcement.

Web Page: <a href="http://www.680smartlane.org/">http://www.680smartlane.org/</a>

For More Information Contact: Jean Hart, Deputy Director, Alameda County Congestion Management Agency; Phone (510) 836-2560; Fax (510) 836-2185; E-mail: <a href="mailto:jhart@accma.ca.gov">jhart@accma.ca.gov</a>.

# COLORADO: HOT Lanes on I-25/US 36 in Denver

**What:** The I-25 HOV/tolled Express Lanes opened in June 2006, marking the first time solo drivers could legally access the existing HOV lanes (along I-25 from US 36 into downtown) by paying a toll.

**Where:** The I-25 Bus/HOV lanes, also known as Downtown Express lanes, consists of a two-lane barrier-separated reversible facility in the median of I-25 between downtown Denver and 70<sup>th</sup> Avenue, a distance of 6.6 miles.

**Purpose:** The purpose of the I-25 Express Lanes is not to generate revenue but rather to cover expenses such as maintenance and snow removal that was previously paid for by taxpayers.

**Fees:** Toll rates for the I-25 Express Lanes vary by time of day to ensure the lanes remain free-flowing. Toll collection is electronic only, with an EXpressToll® transponder. No cash is accepted.

**Project Status:** The number of vehicles paying a toll to travel in the I-25 Express Lanes during the first quarter of 2008 was 103,257 in January, 103,646 in February, and 98,689 in March. Toll

08-06-08 Page 2 of 33

<sup>\*</sup> Projects funded by the FHWA Value Pricing Pilot Program

revenues of \$215,232 in January, \$190,945 in February, and \$202,335 in March were collected, exceeding each month's projection of \$161,600.

**For More Information Contact:** Peggy Catlin, Colorado Department of Transportation, 4201 East Arkansas Avenue, Suite 260, Denver, Colorado 80222; Phone (303) 757-9208; E-mail: <a href="mailto:peggy.catlin@dot.state.co.us">peggy.catlin@dot.state.co.us</a>.

#### FLORIDA: HOT Lanes on I-95 in Miami-Dade County

**What:** The study evaluated adding a new lane in the median of I-95. A moveable zipper barrier would permit multiple lane configurations of between two and three HOT lanes in the peak direction. The additional lanes would use the two existing HOV lanes. The HOT lanes would allow multiple ingress and egress points.

**Where:** FDOT is planning a Pilot Project to provide Managed Lanes on I-95, from I-395 in Miami-Dade County, to I-595 in Broward County.

Who: The Florida Department of Transportation (FDOT) conducted a preliminary feasibility study

**Method:** It is anticipated that this pilot will introduce Managed Lanes to commuters on the I-95 corridor while also generating net revenues to help finance the project.

**Fees:** The 95 Express lanes will have variable congestion pricing, or tolls, that fluctuate with increased congestion so that an operating speed of 50 MPH can be maintained. Transit (buses) and registered high occupancy vehicles with three or more people (HOV-3) could use the 95 Express lanes at no cost. Additionally, all other vehicles will be allowed to enter the 95 Express lanes by paying a toll with the use of SunPass. In addition to toll revenue supporting the cost of the project, FDOT is proposing to allocate a portion of the tolls to support the operation of Bus Rapid Transit on the corridor.

Web Page: <a href="http://www.95express.com">http://www.95express.com</a>.

**For More Information Contact:** Kenneth Jeffries, Office of Planning FDOT, District 6; Phone (305) 470-6736; Fax (305) 470-6737; E-mail: <a href="mailto:ken.jeffries@dot.state.fl.us">ken.jeffries@dot.state.fl.us</a>.

#### MINNESOTA: HOT Lanes on I-394 in Minneapolis

**What:** Converts the existing high occupancy vehicle (HOV) lane on I-395 into the state's first high occupancy toll (HOT) lane, *MnPASS lane*. The first phase of the project opened in May 2005. Two sections, east section - two reversible lanes, barrier separated. West section - one lane in each direction with double-white stripes separating HOT lane from general purpose lane. Policy sets speed on lanes above 55 miles per hour, 95 percent of the time.

Where: I-395 from Highway 101 to I-94 in Minneapolis, MN

Method: Lanes are dynamically priced

**Fees:** Lanes remain free to HOVs and motorcyclists during peak hours, and are free to all users in off-peak periods

**Project Update:** Phase II planning for I-394 MnPASS is underway. Planning includes facility design concepts, land use and urban design analysis, transit advantages, telecommuting, and outreach and education.

**For More Information Contact:** Kenneth R. Buckeye, Program Manager Value Pricing; Phone (651) 366-3737; E-mail: <a href="mailto:kenneth.buckeye@dot.state.mn.us">kenneth.buckeye@dot.state.mn.us</a>.

08-06-08 Page 3 of 33

#### \*TEXAS: HOT Lanes on I-10 and US 290 in Houston

**What:** Houston's "QuickRide" pricing program was implemented on existing HOV lanes of I-10, also known as the Katy Freeway in January 1998. It was implemented on US 290 in November 2000.

Where: HOV Lanes on I-10 and US 290 in Houston, TX

**Method:** The HOV lanes are reversible and restricted to vehicles with three or more persons during the peak hours of the peak periods. The pricing program allows a limited number of two-person carpools to buy into the lanes during the peak hours.

**Fees:** Participating two-person carpool vehicles pay a \$2.00 per trip toll while vehicles with higher occupancies continue to travel free. Single-occupant vehicles are not allowed to use the HOV lanes.

**Project Status:** The final report has been completed. Reports and findings may be found at <a href="http://houstonvaluepricing.tamu.edu/reports">http://houstonvaluepricing.tamu.edu/reports</a>.

**For More Information Contact:** David Fink, Transportation Operations Engineer, Texas Department of Transportation; Phone (713) 881-3063; E-mail: <a href="mailto:dfink1@houstontranstar.org">dfink1@houstontranstar.org</a>.

# \*WASHINGTON: HOT Lanes on SR 167 in the Puget Sound Region

**What:** The State Route (SR) 167 High-Occupancy Toll (HOT) Lanes Pilot Project is a four year pilot project that will convert the existing HOV lanes on SR 167 within King County/Seattle, Washington to HOT lanes without expansion of the existing freeway.

Where: Nine miles on SR 167 from Southwest 15<sup>th</sup> Street in Auburn, WA to I-405 in Renton, WA

**Method:** Toll rates increase and decrease with the level of congestion to ensure that traffic in the HOT lane always flows freely and carpools enjoy the same fast and reliable trip they have in HOV lanes.

**Fees:** The State Transportation Commission established the minimum toll rate at \$0.50 and maximum toll rate at \$9.00. The Washington State Legislature approved the rates and the Governor signed the bill.

Web Page: <a href="http://www.wsdot.wa.gov/Projects/SR167/HOTLanes/">http://www.wsdot.wa.gov/Projects/SR167/HOTLanes/</a>.

**For More Information Contact:** Patty Rubstello, Project Manager, Washington State DOT; Phone (425) 450-2720; E-mail: rubstep@wsdot.wa.gov.

# **CORDON TOLLS**

Cordon tolls are fees paid by motorists to drive in a particular area, usually a city center. Some cordon tolls only apply during peak periods, such as weekdays. This can be done by simply requiring vehicles driven within the area to display a pass, or by tolling at each entrance to the area.

08-06-08 Page 4 of 33

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# \*CALIFORNIA: Area Road Charging and Parking Pricing in San Francisco

**What:** The goal of this proposal will be to implement the first area-wide parking pricing pilot and lead to the first national implementation of an area road pricing pilot.

The City proposes a two-pronged approach:

1) implement priced parking at the metered spaces (this is already implemented at city-owned garage facilities); and

2) develop a plan to implement area road pricing within 2 years.

Where: San Francisco, CA

Method: Still in study phase

Web Page: www.sfmobility.org

For More Information Contact: Zabe Bent, Senior Transportation Planner, San Francisco County

Transportation Authority; E-mail: <u>elizabeth.bent@sfcta.org</u> or.

# FLORIDA: Cordon Pricing in Lee County

**What:** The Town was awarded a grant to study the feasibility of introducing a new variable toll at both approaches to the Town. The Lee County Board of Commissioners approved a one year trial period for implementing One-Way Tolls on the Cape Coral and Midpoint Memorial Bridges. The trial period started November 1, 2007. One-Way Tolling is being studied as a way to make Lee Way more efficient to reduce operating expenses and to facilitate changes to improve traffic flow at the toll plazas.

**Where:** The island community of Fort Myers Beach in Lee County, Florida. Access to the Town is provided by road at two points of entry

Method: Project in study phase

#### **FAIR LANES**

"FAIR" lanes stands for "Fast and Intertwined Regular" lanes. Multiple freeway lanes are separated, typically using plastic pylons and striping, into two sections: "fast" lanes and "regular" lanes. The fast lanes would be electronically tolled express lanes, where tolls could change dynamically to manage demand. In the remaining unpriced lanes, drivers whose vehicles were equipped with transponders would be compensated with credits that would be based on the tolls in effect at the time they traveled, and would be established at a percentage of the toll rate.

# \*CALIFORNIA: FAIR Lanes with Dynamic Ridesharing in Alameda County

**What:** The study focused on limited eligibility FAIR lanes, which would provide credits for low-income travelers in the corridor. The study was completed in August 2005. The name of the study was changed to HOT/Credit (HOT/C) Lanes to better reflect the focus of the effort to provide credit for low income travelers in the general purpose congested lane to be used for the HOT/C lane.

**Where:** Interstate 580 and the "Sunol Grade" portion of Interstate 680; connector ramps at the I-580/I-680 interchange near the Dublin-Pleasanton Bay Area Rapid Transit (BART) station.

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08-06-08 Page 5 of 33

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**Method:** Dynamic ridesharing enables travelers to respond to pricing in flexible ways that traditional ridesharing and transit options do not. It uses web-based and telephone-based systems to allow users to find carpool partners on a "real-time" basis, close to the time that travel is needed. In addition to cost and time savings (due to free use of express lanes), dynamic ridesharing would be further facilitated with reserved premium parking spaces at participating BART stations, on-demand backup services, and in-station electronic information screens providing necessary details about individual ride matches.

**Public Support:** Polling indicated that HOT/C was not well supported by the public.

Web Page: The final Evaluation Report is available on the CMA's web site www.accma.ca.gov

For More Information Contact: Elizabeth Walukas, Senior Transportation Planner, Alameda County CMA; Phone (510) 836-2560 extension 26; Fax (510) 836-2185; E-mail: <a href="mailto:bwalukas@accma.ca.gov">bwalukas@accma.ca.gov</a>.

#### PRICING ON EXISTING LANES

#### **MINNESOTA: Priced Dynamic Shoulder Lanes**

Priced Dynamic Shoulder Lanes – Converting narrow bus-only shoulder lanes along the Interstate to wider priced dynamic shoulder lanes (PDSLs), and moving these lanes from the right-most to the left-most portion of the roadway to minimize conflict with entering vehicles.

**What:** The Twin Cities Metropolitan Area, encompassing Minneapolis and St. Paul, will be converting narrow bus-only shoulder lanes along the northbound portion of Interstate 35W between 46th Street and downtown Minneapolis to wider priced dynamic shoulder lanes (PDSLs), and will be moving these lanes from the right-most to the left-most portion of the roadway to minimize conflict with entering vehicles.

**Where:** The plan is for the PDSLs to link up with new, dynamically-priced high-occupancy toll (HOT) lanes on Interstate I-35W, created by converting the existing high-occupancy vehicle (HOV) lanes which extend from approximately I-494 to the Burnsville Parkway, and also to extend these HOT lanes through the Crosstown Commons between I-494 and 46th Street. The end result will then be a new 15-mile, dynamically-priced managed-lane corridor, speeding bus and HOV trips and also providing motorists a new option to experience a fast and reliable trip.

**Fees:** Buses and high-occupancy vehicles will operate at no charge in the PDSLs with access allowed during peak times to single-occupant vehicles whose drivers are willing to pay the toll, with prices set to ensure free-flow travel.

For More Information Contact: Nick Thompson, UPA Project Manager, MnDOT, phone (651) 234-7728, email Nick.Thompson@dot.state.mn.us

#### \*WASHINGTON: Variable Priced Tolls on SR 520 in Seattle

Variable Priced Tolls on SR 520 in Seattle – Introduce new tolls on SR 520, setting toll rates on the facility based upon demand so as to avoid the build up of congestion and the loss of roadway capacity when it is most needed. Toll rates will be communicated in real-time, and revenues from tolling will be used to help finance the bridge replacement.

08-06-08 Page 6 of 33

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**What:** The plan is to introduce new tolls on SR 520 setting toll rates on the facility based upon demand so as to avoid the build up of congestion and the loss of roadway capacity when it is most needed. Toll rates will be communicated in real-time, and revenues from tolling will be used to help finance the bridge replacement.

Where: SR-520 between I-5 in Seattle and I-405 in Bellevue, WA

**Method:** The project is to deploy "open road" electronic toll collection equipment, allowing tolls to be collected at freeway speeds. Tolls will be collected using in-vehicle transponders, with supplemental automatic cameras to read license plates for vehicles not equipped with transponders.

**For More Information Contact:** Patty Rubstello, Urban Planning Office, Washington State DOT, (206) 464-1299, <a href="mailto:rubstep@wsdot.wa.gov">rubstep@wsdot.wa.gov</a>

#### PRICED NEW LANES

Priced new express lanes involve tolls on added lanes that vary by time-of-day and are collected at highway speeds using electronic toll collection technology. Tolls may be set "dynamically," i.e., they may be increased or decreased every few minutes to manage demand so as to ensure that the lanes are fully utilized, yet remain uncongested.

# \*CALIFORNIA: Express Lanes on State Route 91 in Orange County

**What:** The 91 Express Lanes opened in December 1995 as a four-lane toll facility in the median of a 10-mile section of the state route – Riverside / 91 freeway.

Where: 10-mile section of the Riverside / 91 freeway in Orange County.

**Method:** Toll revenues have been adequate to pay for construction and operating costs. The toll lanes are separated from the general purpose lanes by a painted buffer and plastic channelizers. All vehicles must have a "FasTrak<sup>TM</sup>" transponder to travel on the express lanes

**Fees:** In the toll schedule effective July 2007, tolls on the express lanes vary between \$1.20 and \$9.50, with the tolls set by time of day to reflect the level of congestion delay avoided in the adjacent free lanes, and to maintain free-flowing traffic conditions on the toll lanes. Vehicles with three or more occupants travel free except when traveling Eastbound, Monday through Friday between the hours of 4:00 p.m. and 6:00 p.m., when they pay 50 percent of the regular toll. This policy also applies to individuals on a motorcycle. Other toll discount offers are extended to zero-emission vehicles and vehicles with disabled person's license plates.

**Study Completed:** The project was completed in 2000. Study Results can be accessed at <a href="http://ceenve.calpoly.edu/sullivan/sr91/sr91.htm">http://ceenve.calpoly.edu/sullivan/sr91/sr91.htm</a>.

For More Information Contact: Kirk Avila, Toll Road & Motorist Services; Phone (714) 560-5988; E-mail: <a href="mailto:kavila@octa.net">kavila@octa.net</a>.

# CALIFORNIA: I-15 Managed Lanes in San Diego

**What:** I-15 HOT Lanes described above in the "Converting HOV Lanes to HOT Lanes" section are being extended to create a 20-mile "Managed Lanes" facility. A four-lane facility in the median with a moveable barrier, multiple access points from the regular highway lanes, and direct access ramps for buses from five transit centers. A high frequency bus rapid transit (BRT) system is under

08-06-08 Page 7 of 33

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development and will replace the existing express buses that serve the corridor. Project is in three phases. The first stage adds eight miles directly abutting the existing 8-mile reversible HOT lanes and latter stages will be added in 2011 and 2012.

Where: In the median of I-15 between SR 163 and SR 78.

**Method:** Applying dynamic tolling through a skewed, per-mile rate. The distance-based fares will fluctuate based on the value of travel time saved between the managed lanes and adjacent general purpose lanes, and from the level of congestion in the managed lanes. The toll system will read vehicles upon entry and exit to calculate the toll rate. When complete, the new state-of-the-art system will collect tolls from over 30 locations covering 82 "tolled lanes".

**Study Report:** The I-15 Managed Lanes Value Pricing Planning Study was completed in 2002 and project deliverables are available at:

http://www.sandag.org/index.asp?projectid=34&fuseaction=projects.detail

**Web Page:** More details on the project are available at <a href="https://www.keepsandiegomoving.com">www.keepsandiegomoving.com</a> and <a href="https://www.keepsandiegomoving.com">www.keepsandiegomoving.c

**For More Information Contact:** Derek Toups, San Diego Association of Governments; Phone (619) 699-1907; E-mail: <a href="mailto:dto@sandag.org">dto@sandag.org</a>.

# \*CALIFORNIA: Dynamic Pricing on SR 91 in Orange County

What: Study and implement dynamic pricing on SR 91 in Orange County

Where: SR 91 in Orange County

For More Information Contact: Kirk Avila, Toll Road & Motorist Services; Phone (714) 560-5988;

E-mail: kavila@octa.net.

#### CALIFORNIA: Violation Enforcement System on I-15 Managed Lanes in San Diego

**What:** San Diego Association of Governments (SANDAG) is studying the feasibility of applying state-of-the-art violation enforcement systems (VES) to improve accuracy in verifying vehicle passenger counts and enforcing HOV and toll provisions of the future I-15 Managed Lanes.

Where: I-15 in San Diego

**Method:** Elements of the VES study will be integrated into, the FasTrak® electronic toll collection system for the I-15 Managed Lanes. Other more advanced approaches would require proof-of-concept testing which may be conducted on the existing barrier-separated reversible HOT lanes subsequent to the deployment of the I-15 Managed Lanes toll system in 2008. The VES will utilize a combination of technology and business rules for the effective processing of HOT-lane violators.

**Final Report:** The I-15 Managed Lanes Violation Enforcement Study Report http://www.sandag.org/index.asp?projectid=67&fuseaction=projects.detail

Web Page: The I-15 Managed Lanes web page:

http://www.sandag.org/index.asp?projectid=34&fuseaction=projects.detail

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08-06-08 Page 8 of 33

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**For More Information Contact:** Derek Toups, San Diego Association of Governments; Phone: (619) 699-1907; E-mail: dto@sandag.org.

#### \*CALIFORNIA: HOT Lanes on State Route 1 in Santa Cruz County

**What:** A five-mile section of State Route 1 is proposed for widening. The facility is currently a four-lane divided freeway. Within the study corridor limits there are seven interchanges. Five HOT lane alternatives were studied in detail, including:

- (1) one lane in each direction with barrier separation, no intermediate access;
- (2) one lane in each direction, with buffer separation, no intermediate access;
- (3) one lane in each direction with striped separation, 1 or 2 intermediate access points;
- (4) one lane in each direction with striped separation, continuous access; and
- (5) one reversible lane with barrier separation, no intermediate access

Based on the study results, in June 2002, the Regional Transportation Commission voted <u>not</u> to include a HOT lane alternative in further consideration, however it did select a carpool lane alternative with a footprint that would allow conversion to a HOT lane at a future date, should demand warrant it.

Where: Santa Cruz County

**Final Report:** The Final Report is available on the Santa Cruz County Regional Transportation Commission's web site <a href="http://www.sccrtc.org/highway.html">http://www.sccrtc.org/highway.html</a>.

**Study Completed:** There are no additional activities expected on this project.

**For More Information Contact:** Karena Pushnik, Santa Cruz County Regional Transportation Commission; Phone: (831) 460-3210; E-mail: <a href="mailto:karena.pushnik@co.santa-cruz.ca.us">karena.pushnik@co.santa-cruz.ca.us</a>.

# \*COLORADO: Express Toll Lanes on C-470 in Denver

**What:** A feasibility study was recently completed which evaluated the design, operational and financial feasibility, and expected public acceptance of Express Lanes on the 26-mile C-470 beltway in the southwest part of the Denver metro area.

Where: C-470 is a four-lane beltway between I-70 and I-25 with 18 interchanges.

**Method:** The concept studied is a four lane barrier-separated facility in the median of four general purpose lanes would manage volumes in the Express Lanes by charging a variable toll to ensure reliable, free-flowing traffic conditions.

**Study Completed:** The C-470 Express Lanes Feasibility Study Final Report is available. Go to www.c470.info for updated information.

**Project Status:** The environmental assessment is on hold due to local government opposition.

**For More Information Contact:** Ron Buck, Colorado Department of Transportation; Phone: (303) 972-9112; E-mail: <a href="mailto:ron.buck@dot.state.co.us">ron.buck@dot.state.co.us</a>.

# FLORIDA: Priced Queue Jumps in Lee County

**What:** A feasibility study of Queue Jumps in Lee County, Florida. The feasibility analysis indicated that while gueue jumps did not appear to be a good candidate for traditional toll bond financing, they

08-06-08 Page 9 of 33

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are nonetheless financially feasible. A Queue Jump is a facility that can be used to bypass points on the transportation network where congestion is particularly severe and occurs in a predictable pattern.

Where: Highway and arterial intersections in Lee County, Florida

**Method:** Tolls would vary by time of day and would be levied electronically, and would be tied in with the County's existing ETC system. A significant characteristic of queue jumps is their ability to generate revenue for needed roadway improvements while simultaneously contributing to travel demand management.

Public Support: The analysis has shown favorable public acceptance

**For More Information Contact:** Sarah Clarke, Lee County Department of Transportation; Phone: (239) 533-8718; E-mail: sclarke@leegov.com.

#### \*FLORIDA: I-95 Priced Managed Lanes in Miami-Fort Lauderdale Region

**What:** Creating a 21-mile managed-lane facility on I-95 in the Miami-Ft. Lauderdale region. A single HOV lane into two high-occupancy toll (HOT) lanes in each direction by narrowing the travel lanes from 12' to 11' and narrowing the shoulders. Anticipated completion will be June 2009.

The longer-term plan is to convert the flat-rate tolls on the limited-access expressways in South Florida to variable rates based on travel demand. Over half of such expressways are currently tolled.

**Where:** I-95, between I-395 in Dade County (Miami area) and I-595 Broward County (Fort Lauderdale area)

**Method:** Variable pricing will be applied based upon demand and the network itself will be used as the back-bone of a bus rapid transit (BRT) system which will be subsidized through the toll revenues. Toll rates will be adjusted as often as every three minutes in order to maintain free-flowing conditions on the managed lanes at least 90 percent of the time.

For More Information Contact: 1-95 Managed Lanes Pilot Project

#### \*GEORGIA: Express Toll Lanes on I-75 in Atlanta

**What:** The project evaluated the feasibility of implementing value pricing concepts and Bus Rapid Transit in the I-75 corridor in the Atlanta area.

**Where:** I-75 south corridor in Atlanta area, that extends from I-285 south to SR 16 near the City of Jackson in Butts County.

**Project Completed:** The final report <a href="http://srta-valuepricing.net/i75">http://srta-valuepricing.net/i75</a> south/i75 south.htm is available on the State Road Toll Authority web site at <a href="http://sww.georgiatolls.com">www.georgiatolls.com</a>. Managed lanes with pricing will definitely be implemented on I-75 through Atlanta. The project is currently projected to take place in 5-7 years because new lanes must be built to permit the priced lanes.

**For More Information Contact:** Patrick Vu, Senior Transportation Consultant, State Road and Tollway Authority; Phone: (404) 893-6130; E-mail: <a href="mailto:patrickvu@georgiatolls.com">patrickvu@georgiatolls.com</a>.

08-06-08 Page 10 of 33

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# \*GEORGIA: I-75 South HOT/Truck-Only Toll (TOT) Study in Atlanta

**What:** The High Occupancy Toll (HOT) Lanes Feasibility Study sought to identify corridors where HOT Lanes Facilities would provide congestion relief and enhance safety and efficiency to justify their installation in the Atlanta Metropolitan Area.

The Truck Only Toll (TOT) Lanes Feasibility Study sought to examine whether the concept of optional truck only facilities would provide congestion relief and enhance safety and efficiency to justify their installation in the Atlanta Metropolitan Area. The proposal included elements to improve the travel demand model to address pricing of truck travel, and to conduct market research and other activities.

Where: I-75 South in the Atlanta area.

**Project Completed:** Both the HOT and TOT Studies were finalized as of July 2005. The final report is available: <u>TOT Final Report.</u> More information on the HOT/TOT Study can be found at: <a href="http://www.hotandtotstudv.com/">http://www.hotandtotstudv.com/</a>

Web page: <a href="http://srta-valuepricing.net/i75\_south/i75\_south.htm">http://srta-valuepricing.net/i75\_south/i75\_south.htm</a>

**For More Information Contact:** Patrick Vu, Senior Transportation Consultant, State Road and Tollway Authority; Phone: (404) 893-6130; E-mail: <a href="mailto:patrickvu@georgiatolls.com">patrickvu@georgiatolls.com</a>.

# MARYLAND: Express Toll Lanes on Section 100 of the I-95/JFK Expressway in Baltimore

**What:** Value Pricing Pilot Program amended to evaluate the possible implementation of variable tolls on selected state highways and toll facilities in the State of Maryland. Study facilities that have the potential to provide a comprehensive approach to making improvements to congested facilities that would allow MDOT to reduce travel delays and offer premium service.

**Where:** A Value Pricing Pilot program Toll Agreement was executed between the Federal Highway Administration, the Maryland Department of Transportation, and the Maryland Transportation Authority (MdTA) to authorize the collection of tolls on the new Express Toll Lanes (ETLs) on the I-95/JFK Expressway in Baltimore.

**Project Status**: This project did not receive Value Pricing Pilot (VPP) program funds; however the project received FHWA approval to toll the facility through the VPP program. Construction began on the first I-95 ETLs section, the Rossville Boulevard overpass, in November 2005. Mainline construction began in Fall 2006. It is anticipated that the project will be completed in late 2011.

**For More Information Contact:** Melissa Williams, Planning Manager, Maryland Transportation Authority-Capitol Planning Division; Phone: (410) 537-5651; E-mail: <a href="mailto:mwilliams9@mdta.state.md.us">mwilliams9@mdta.state.md.us</a>.

# MARYLAND: Express Toll Lanes on Section 200 of the I-95/JFK Expressway in Baltimore

**What:** The I-95 Section 200 Project Planning Study began in the fall of 2005. Three alternatives are currently being considered; they include the No-Build, General Purposes Lanes and Express Toll Lanes (ETLs) alternatives adding ETLs to approximately a 10-mile stretch of I-95 in Baltimore.

**Where:** A 10-mile stretch of I-95 / JFK Expressway in Baltimore. The Section 200 ETLs would be immediately north of the Section 100 ETLs, providing a total of nearly 20 miles of ETLs.

Web Page: I-95 Section 200 Project Web page

**Project Status**: This project is currently in the project planning phase. Approval of the final environmental document is anticipated in Fall 2008.

08-06-08 Page 11 of 33

**For More Information Contact:** Melissa Williams, Planning Manager, Maryland Transportation Authority-Capitol Planning Division; Phone: (410) 537-5651; E-mail: <a href="mailto:mwilliams9@mdta.state.md.us">mwilliams9@mdta.state.md.us</a>.

#### NORTH CAROLINA: HOT Lanes on I-40 in Raleigh/Piedmont Triad

**What:** HOT lanes and other potential value pricing options are being explored on I-40 in North Carolina.

**Where:** HOT lanes and other potential value pricing options are being explored on I-40 in North Carolina's Piedmont (Greensboro, High Point, and Winston-Salem) and Research Triangle (Raleigh and Durham) areas.

Study Completed: The study was completed in October 2005. The report was finalized.

**For Additional Information Contact:** Mustan Kadibhai, NCDOT; Phone: (919) 508-1819; E-mail: mkadibjai@dot.state.nc.us.

#### \*OREGON: Express Toll Lanes on Highway 217 in Portland

**What:** The Highway 217 Corridor Study in the Portland area developed and evaluated several rush hour toll and ramp meter bypass alternatives in this corridor, including consideration of FAIR lanes among other value pricing approaches at ramp meters. A prior study, the Traffic Relief Options study, evaluated value pricing in the Portland metro area from a regional perspective and recommended that value pricing be considered whenever major new highway capacity is added.

**Where:** The highway 217 corridor, which connects I-5 to US 26, is the major north-south transportation route in the Washington County portion of the Portland metropolitan area.

Web Page: Highway 217 Corridor Study.

**For More Information Contact:** Ms. Bridget Wieghart, Metro Project Manager; Phone: (503) 797-1775; E-mail: <a href="mailto:wieghartb@metro.dst.or.us">wieghartb@metro.dst.or.us</a>.

#### TEXAS: Value Priced Express Lanes on I-10 in San Antonio

**What:** Examine the use of value pricing on I-10 in the San Antonio area. The study will consider use of tolling for demand management and public acceptability of tolling; integrate value pricing with financial and mobility goals; and establish baseline travel characteristics for development of future monitoring and evaluation plans

**Where:** Examine the use of value pricing on I-10 on a 19-mile segment between SH 1604 and SH 46.

**For More Information Contact:** Judy Friesenhahn, Planning Engineer, Texas Department of Transportation; Phone: (210) 615-5814; E-mail: <a href="mailto:jfriesenhahn@dot.state.tx.us">jfriesenhahn@dot.state.tx.us</a>.

#### **TEXAS: HOT Lane Enforcement and Operations on Loop 1 in Austin**

**What:** Enforcement and Operations study for HOT Lane on the Mopac Expressway (Loop 1) in the Austin area. The Loop 1 HOT lane is envisioned as a facility that will provide a high level of service and travel time advantages for express bus/BRT, vanpools and carpools while allowing paying Single

08-06-08 Page 12 of 33

<sup>\*</sup> Projects funded by the FHWA Value Pricing Pilot Program

Occupant Vehicles to use the lane. It is also envisioned that the HOT lane will be actively managed according to an operational plan that triggers changes in price in order to maintain free flow conditions for express bus/BRT. This study would develop an enforcement and operations strategy for this facility.

**Where:** The Loop 1 corridor in Austin, TX extends from State Highway (SH) 45 in southern Travis County to Farm-to-Market (FM) 734 (Parmer Lane) in Northern Travis County.

**Project Status:** Work on the project was officially suspended in early February 2008 due to TxDOT budgetary constraints.

Web Page: Project information can be found at www.MoPac1.org.

**For More Information Contact:** Mark Herber, Texas Department of Transportation, Phone: (512) 832-7077, E-mail: <a href="mailto:mherber@dot.state.tx.us">mherber@dot.state.tx.us</a>; Ginger Gooden P.E., Phone: (512) 467-0946, E-mail: <a href="mailto:G-goodin@tamu.edu">G-goodin@tamu.edu</a>.

# **TEXAS:** Express Toll Lanes on the LBJ Freeway in Dallas

What: The Project includes:

- Adding managed HOV lanes to I-635 from Luna Road to the High Five including full reconstruction of I-635 from I-35E to the High Five (the I-635 West Section)
- Adding elevated managed HOV lane connectors along I-35E from Loop 12 to I-635 (the Loop 12/ I-35E Section)
- Adding operational improvements on the I-635 managed HOV lanes within the High Five (the I-635/US 75 interchange)

A key aspect of the approved project is that the two sections of the east-bound and west-bound express lanes will be located below grade in some combination of u-wall, cantilevered, straddle or tunnel segments to maintain TxDOT's and the region's commitment to "No Higher, No Wider" than what has been previously approved in the public involvement phase.

**Where:** The LBJ Freeway (I-635) is the major circumferential roadway in the Dallas region. The total length of the corridor is 21 miles. The base initial project is along I-635 from US 75 heading west to I-35E and then southbound along I-35E to the I-35E/LP 12 split.

**Method:** Currently, the West Section facility consists of eight general-purpose lanes and one HOV lane in each direction. The facility will be upgraded with up to six managed lanes (three in each direction). The proposed lane configuration would vary - the West Section would have six express lanes, the East Section from US-75 to I-30 would vary from having four express lanes (two in each direction) to having two reversible lanes to I-30. The LBJ express lane project design uses variable tolling to provide free-flowing traffic conditions and connections to transit centers to support Bus Rapid Transit (BRT).

**Web Page:** Additional project information can be found at the project web site: http://www.635project.com.

**Project Status:** This project received approval for FHWA *Express Lane Demonstration* (*ELD*) program funds in March of 2008.

**For More Information Contact:** John Hudspeth, P.E. CDA/Tollway Office; Phone: (214) 320-4490; E-mail: <a href="mailto:jhudsp1@dot.state.tx.us">jhudsp1@dot.state.tx.us</a>.

08-06-08 Page 13 of 33

# **TEXAS: HOT Lanes on the Katy Freeway in Houston**

**What:** The I-10 / Katy Freeway in and around Houston, TX is proposed to be expanded to eight general-purpose lanes, four in each direction, with continuous three-lane frontage roads in each direction. In addition, in the center of the facility from I-610 west to State Highway 6, four HOT lanes are proposed, two in each direction. From State Highway 6 to the Grand Parkway, two HOT lanes are proposed, one in each direction.

**Where:** Katy Freeway (I-10), in the western portion of Houston. The existing freeway is 23 miles long and consists of six general-purpose main lanes (three in each direction), with two-lane continuous one-way frontage roads in each direction for most of its length. Additionally, the freeway has an one-lane reversible high occupancy vehicle (HOV) lane between I-610 and State Highway 6, and one HOV lane in each direction between State Highway 6 and the Grand Parkway (State Highway 99).

**Project Status:** The Katy Freeway HOT Lanes project did not receive Value Pricing funds, however the project obtained the authority to toll through the Value Pricing Program in 2002. Construction continues and toll operations are slated to begin in the late Summer or early Fall of 2008.

**For More Information Contact:** David Fink, Texas Department of Transportation; Phone: (713) 881-3063; E-mail: <a href="mailto:dfink1@houstontranstar.org">dfink1@houstontranstar.org</a>.

#### **TEXAS:** Express Toll Lanes on I-30/Tom Landry in Dallas

**What:** The project opened in August 2007 as an <u>interim</u> "Managed HOV Lane". The project is initially operating in HOV only mode. It will transition to "Express Lanes" with pricing in later phases as the tolling infrastructure is constructed. The I-30 project features will include; dual declaration lanes, dynamic pricing and extended operating hours. The features proposed for I-30 are also being proposed on other facilities in the Dallas / Ft. Worth region and likely other parts of Texas.

**Where:** I-30 / Tom Landry freeway in the Dallas / Fort Worth region

**Project Status:** To find out what the ultimate project looks like go to: (<a href="www.keepitmovingdallas.com">www.keepitmovingdallas.com</a>) click on 2006 Public Hearings for I-30 (Scroll a bit to view the presented and approved schematics).

**For More Information Contact:** Matthew MacGregor, P.E., Texas Department of Transportation; CDA/Tollway Director Dallas District; Phone: (214) 319-6571; E-mail: mmacgre@dot.state.tx.us.

#### TEXAS: Express Toll Lanes on I-35 in San Antonio

**What:** TxDOT evaluated managed lane options for a 15-mile section of I-35 in San Antonio, TX. The project evaluated potential operating strategies, including value pricing, which could be used as tools to manage travel demand on I-35. The team evaluated alternative pricing scenarios that could be utilized to allow certain user groups into the managed lanes at different stages over the facility's life.

Where: A 15-mile section of the Northeast Corridor (I-35) in San Antonio, TX

**Public Support:** the political climate in the area is unfavorable toward tolling and the project involves a large portion of elevated roadway adding considerable expense

**Project Completed:** The road will probably be tolled in some form once it is completed and responsibility for the project has been turned over to the Regional Mobility Authority, the local tolling agency. Selection of an alternative is not anticipated for at least 5 years because the political climate in the area is unfavorable toward tolling and the project involves a large portion of elevated roadway adding considerable expense.

08-06-08 Page 14 of 33

**For More Information Contact:** Judy Friesenhan, Planning Engineer, Texas Department of Transportation; Phone: (210) 615-5814; E-mail: jfriese@dot.state.tx.us.

#### PRICING ON TOLL FACILITIES

Pricing on toll facilities involve tolls on congested toll facilities that are varied by time of day with the intention of encouraging some travelers to use the roadway during less congested periods, to shift to another mode of transportation, or to change routes. With less people traveling during congested periods, the remaining peak period travelers will have decreased delays. To be eligible for the variable toll programs, vehicles must be equipped with transponders, which are read by overhead antennas.

#### CALIFORNIA: Peak Pricing on the San Joaquin Hills Toll Road in Orange County

**What:** Peak pricing was employed on this six-lane toll road facility to reduce congestion. Currently, the toll road is near capacity during peak periods.

**Where**: The San Joaquin Hills Toll Road (State Route 73) is 15 miles long and extends from Interstate 405 in Costa Mesa near Fairview Avenue through the San Joaquin Hills to its southern terminus of Interstate 5 in San Juan Capistrano.

**Fees:** A small peak period premium of 25 cents was implemented at the mainline plaza in February 2002. This was increased to 50 cents in July 2005 and to 75 cents in July 2006. The premium was designed to reduce congestion and spread peak demand to shoulder and off-peak periods, while maintaining revenues at levels required to maintain the covenants on the Agency's revenue bonds.

**Project Status:** It carries in excess of 2.3 million vehicles monthly (2.7 million annual average) on a six-lane facility. Currently the Toll Road is near capacity during peak periods.

**Project Completed:** The project team submitted their draft final report to FHWA. Despite toll increases of 50 cents at peak and 25 cents off-peak at the mainline plaza implemented on July 3,<sup>rd</sup>, 2006, traffic volumes continued to grow at about 1-2% each year. In March 2007, fiscal year-to-date toll revenue growth increased over 8.6% from last year while traffic was up 1.2%.

**For More Information Contact:** David Lowe, San Joaquin Hills Transportation Corridor Agency; Phone: (949) 754-3488; E-mail: <a href="mailto:lowe@sjhtca.com">lowe@sjhtca.com</a>.

# FLORIDA: Pricing on Bridges in Lee County

**What:** In August 1998, Lee County implemented a value pricing strategy on two toll bridges between the cities of Ft. Myers and Cape Coral.

Where: Lee County, Florida

**Method:** The project created a peak/off-peak pricing structure offering bridge users a discount toll during times before and after the peak traffic periods.

**Fees:** Under the pricing plan, a fifty percent toll discount was provided for trips made during the half-hour period before the morning peak of 7:00-9:00 a.m. and in the two-hour period following the morning peak. In the evening, the discount period is during the two hours before the evening peak of 4:00-6:30 p.m. and during the half hour after the peak.

**Study Completed:** This project was originally funded with Congestion Pricing Pilot Program funds. Information on the project study results along with final reports can be accessed at the following web site <a href="https://www.leewayinfo.com">www.leewayinfo.com</a>. This successful Value Pricing Pilot Program (VPPP) project is still operating.

08-06-08 Page 15 of 33

For More Information Contact: Kris Cella, Cella & Associates, Inc., Phone: (239) 337-1071, E-mail: <a href="mailto:kcella@cella.cc">kcella@cella.cc</a> or Chris Swenson, P.E., CRSPE, Inc., Phone: (239) 573-7960, E-mail: <a href="mailto:crs@crspe.com">crs@crspe.com</a>; Scott Gilbertson, Director, Lee County Department of Transportation, Phone: (239) 479-8580, E-mail: <a href="mailto:gilbersm@leegov.com">gilbersm@leegov.com</a>.

#### FLORIDA: Value Pricing on the Sanibel Bridge and Causeway in Lee County

**What:** This project will study lowering tolls prior to the morning peak and just after it, as well as studying a mid-morning toll differential. This project also offers a toll credit component for motorists willing to travel during off-peak hours.

Where: Sanibel Bridge and Causeway in Lee County, Florida

**For More Information Contact:** Eileen Price, Lee County Department of Transportation; Phone: (239) 533-8507; E-mail: <u>EPrice@leegov.com</u>.

# FLORIDA: Variable Tolls on the Sawgrass Expressway in Broward County

**What:** In May 2003, Florida began a pilot project to combine Open Road Tolling and Value Pricing entitled *Sawgrass Expressway: A Study of New Technologies*. Open Road Tolling (ORT) utilizes electronic toll collection to create a tolled highway system free from toll plazas and delays. The project evaluates the potential for utilizing Value Pricing on the Sawgrass Expressway as a travel demand management strategy. It also documents the evaluation of the traffic impacts associated with the widening of the Sawgrass Expressway from four to six lanes from Atlantic Boulevard to the Turnpike Mainline and removing the two Mainline Toll Barriers

Where: Sawgrass Expressway, Broward County, Florida

**Method:** There would be no toll plazas, tollbooths, or lane restrictions. All traffic would operate at highway speeds, yet every vehicle would pay a toll. Toll collection would occur through equipment located on overhead gantries. Eliminating the toll plazas themselves and the merging and weaving that occur while entering and exiting the plazas enhances roadway capacity and safety. Customers with a transponder would already have a pre-paid account with the toll agency. The toll charge would be automatically debited from their accounts. Value Pricing could be utilized during heavily congested peak periods along the corridor.

**Study Completed:** The final report, Sawgrass Expressway: Study of New Technologies is not available electronically. You can access a copy of the project summary at: <a href="PRICING ON TOLL">PRICING ON TOLL</a> FACILITIES - FLORIDA: New Technologies along the Sawgrass Expressway in Broward Co..

There are no plans to implement the variable toll project at this time on the Sawgrass Expressway. But the agency believes variable tolls will be implemented at a future time. The main issue preventing variable tolling is the lack of collection facilities.

As of June 2007, the first entirely electronic toll plaza in the Turnpike system is set to open in 2016 on Highway 589

**For More Information Contact:** Randy Fox, AICP - Turnpike Planning Manager; Phone: (407) 264-3041; E-mail: Randy.Fox@dot.state.fl.us.

# FLORIDA: Variable Tolls for Heavy Vehicles in Lee County

**What:** The on-going Variable Pricing Program in Lee County (see "Pricing on Bridges in Lee County") was restricted to light duty vehicles. This project expands the existing program to allow three plus axle vehicles to participate in the program and encourages them to travel during off-peak times.

08-06-08 Page 16 of 33

Where: Lee County, Florida

**Study Completed:** The project was implemented in December 2003. The monitoring and evaluation study was completed in February 2005. The Final Report Executive Summary and Table of Contents can be accessed on the FHWA Highway Community Exchange Web site at: <a href="Expansion of Variable Pricing to Heavy Vehicles -- Final Report">Expansion of Variable Pricing to Heavy Vehicles -- Final Report</a>

For More Information Contact: Kris Cella, Cella & Associates, Inc., Phone: (239) 337-1071, E-mail: <a href="mailto:kcella@cella.cc">kcella@cella.cc</a> or Chris Swenson, P.E., CRSPE, Inc., Phone: (239) 573-7960; E-mail: <a href="mailto:crs@crspe.com">crs@crspe.com</a>; Scott Gilbertson, Director, Lee County Department of Transportation, Phone: (239) 479-8580, E-mail: <a href="mailto:qilbersm@leegov.com">qilbersm@leegov.com</a>.

# FLORIDA: Pricing Options on the Florida Turnpike in Miami-Dade County

**What:** The Florida Turnpike Enterprise recently completed a study of the feasibility of implementing value pricing on an extension of the Florida Turnpike.

**Where:** A 21-mile section of the Homestead Extension of Florida's Turnpike (HEFT) in Southwest Miami-Dade County. The project was divided into two unique and distinct segments. The southern segment extends from SR 874 to SR 836. It is approximately eight miles long and includes four interchanges. The northern segment extends from SR 836 to I-75. It is approximately 13 miles long and includes six interchanges.

**Study Completed:** The study recommended widening the HEFT from six to eight lanes in the short-term. The long-term recommendation (by 2010) was to add two reversible, elevated, value-priced Express Lanes. The recommendation for the northern segment was to widen from four to six lanes in the short-term. The long-term recommendation was to add an additional four value-priced express lanes at ground level by 2015.

There are currently no plans to implement value pricing on the Homestead Extension of the Florida Turnpike (HEFT). Like the Sawgrass Expressway project, the elimination of cash payments for tolls is the largest obstacle being faced. The installation of automated toll collection systems is not currently planned, but may be considered in the future as technology advances

**For More Information Contact:** Randy Fox, Turnpike Planning Manager; Phone: (407) 264-3041; E-mail: Randy.Fox@dot.state.fl.us.

#### GEORGIA: Variable Pricing Institutional Study for the GA-400 in Atlanta

What: The State Road and Toll Authority (SRTA) will study the institutional challenges and feasibility of moving from a fixed-priced toll to a variably priced toll system using GA-400 as a case study. The major tasks of the proposal include thorough examination of the Toll Authority's internal processes and procedures; legal, contractual & bond covenants; conceptual traffic & revenue forecasts necessary to meet financial obligations; and development of an implementation plan. The study will produce reports identifying key issues as well as model documents for other toll authorities considering similar conversions. The study will identify issues facing toll authorities considering changing from a fixed toll to a variable toll policy, as well as develop model documents.

Where: Georgia state highway 400 in the Atlanta area.

**Project Status:** The study team has completed preliminary data analysis for the toll plaza optimization alternative. The next steps for this study are to finalize educational materials and processing of survey results for incorporation into a final study report. This study is scheduled to be complete within the current fiscal year.

08-06-08 Page 17 of 33

**For More Information Contact:** Patrick Vu, Senior Transportation Consultant, State Road and Tollway Authority; Phone: (404) 893-6130; E-mail: patrickvu@georgiatolls.com.

# **ILLINOIS: Illinois Tollway Value Pricing Pilot Study**

**What:** A value pricing pilot project is being conducted on the Illinois State Toll Highway Authority (Illinois Tollway) system. Phase 1 was designed as a basic feasibility study and evaluation of possible value pricing options. This included identification of alternative pricing strategies, extensive market research, and traffic and socioeconomic impact analysis.

The new toll rates went into effect and variable pricing was introduced in January 2005. The Tollway is now evaluating the impacts of the new toll rate structure. The original idea of this study was to test a value pricing strategy on a portion of the system on a pilot basis. This possible pilot test has in effect been replaced by a system-wide implementation of a limited value pricing approach.

**Where:** The eastern portion of the I-88 Ronald Reagan Memorial Tollway (formerly the East-West Tollway) from Illinois 31 to the Tri-State Tollway (I-294) a distance of 23 miles is the section chosen for the pilot project study. The Illinois Tollway operates 274 miles of interstate tollways in twelve counties in northern Illinois including the Chicago suburban area.

**Fees:** A summary of the new toll rate structure is as follows: For passenger car users the structure provides a strong incentive for participation in the electronic toll collection program that is called I-PASS on the Illinois Tollway. There was no toll increase for drivers using I-PASS, while tolls were doubled for drivers using cash to pay the toll. Time of day pricing was instituted for commercial vehicles. All commercial vehicles traveling overnight (10 pm to 6 am) receive a discount on tolls. Commercial vehicles using I-PASS traveling off-peak on weekdays and on weekends also receive a discount.

**Project Completed:** The Illinois Tollway approved a comprehensive ten-year Congestion-Relief Plan on September 30, 2004. This plan includes a toll rate structure that incorporates some of the value pricing concepts included in this study. Results of the analysis were presented in a poster session at the Transportation Research Board Annual Meeting in January 2006. The project is essentially complete. A final report is nearing completion and will be issued shortly.

**For More Information Contact:** Eugene Ryan, Wilbur Smith Associates, Phone: (630) 434-8111 extension 107, E-mail: <a href="mailto:eryan@wilbursmith.com">eryan@wilbursmith.com</a>; or Dean Mentjes, Mobility Engineer, FHWA, Phone: (217) 492-4631, E-mail: <a href="mailto:dean.mentjes@fhwa.dot.gov">dean.mentjes@fhwa.dot.gov</a>.

#### **NEW JERSEY: Variable Tolls on the New Jersey Turnpike**

**What:** The Turnpike's variable pricing program began in the fall of 2000.

Where: The New Jersey Turnpike Authority operates a 148-mile facility with 28 interchanges

**Method:** The program provides for tolls that are about twelve percent higher during peak traffic hours than during off-peak periods for users of the electronic toll collection system. The price differential is scheduled to increase in a phased manner over several years.

**Study Completed:** The final report can be accessed from the FHWA Highway Community Exchange Web site at: PRICING ON TOLL FACILITIES - NEW JERSEY: Variable Tolls on the New Jersey Turnpike.

**Study Findings:** The average trip delay was reduced by about 3-18 percent from 2000 to 2001 after the concurrent introduction of E-ZPass and the first phase of the time of day pricing program. The major reason for this reduction was, however, observed to be the reduction in toll plaza delays due to the introduction of E-ZPass.

08-06-08 Page 18 of 33

It was also observed that there was no increase in toll plaza delays despite the increase of traffic volumes from 2001 to 2003. This was due to the increase in the percentage of E-ZPass users over the years. Simulation analyses showed that between 2000 and 2001 there was a reduction in vehicle emission levels as high as 10.7 percent. After 2001 a slight increase in emissions was observed due to the increasing demand, which can be interpreted as an expected outcome given the relationship among the demand, delays and emissions.

**For More Information Contact:** Kaan Ozbay, Ph.D., University Principal Investigator, Rutgers University; Phone: (732) 445-2792; Fax: (732) 445-0577; E-mail: <a href="mailto:kaan@rci.rutgers.edu">kaan@rci.rutgers.edu</a>.

# \*NEW JERSEY: Variable Tolls on Port Authority Interstate Crossings

**What:** The Port Authority of New York and New Jersey (PANYNJ) adopted a variable toll strategy for users of the electronic toll collection system (E-ZPass) in March 2001.

Where: PANYNJ's Interstate Crossings

**Fees:** The Port Authority provides a 20 percent (\$1.00) discount for off-peak tolls on its bridges and tunnels crossing the Hudson River between New York and New Jersey. Peak toll rates are effective on weekdays form 6-9 a.m. and 4-7 p.m., as well as on weekends from 12 Noon to 8 p.m.

**Study Completed:** The final report was completed in March 2005. It can be accessed on the FHWA Highway Community Exchange Web site at: <a href="PRICING ON TOLL FACILITIES - NJ/NY: Variable Tolls on Port Authority Interstate Vehicle Crossings">PRICING ON TOLL FACILITIES - NJ/NY: Variable Tolls on Port Authority Interstate Vehicle Crossings</a>.

For More Information Contact: José Holguín-Veras, Ph.D., P.E., Associate Professor, Rensselaer Polytechnic Institute, 110 8th Street Building JEC 4030, Troy NY 12180-3590; E-mail: <a href="mailto:jhv@rpi.edu">jhv@rpi.edu</a> or Mark F. Muriello, Assistant Director, Tunnels Bridges and Terminals Department, The Port Authority of New York and New Jersey, One Madison Avenue - 5<sup>th</sup> Floor, New York, NY 10010; E-mail: <a href="mmuriello@panynj.gov">mmuriello@panynj.gov</a>.

#### **NEW JERSEY: Express Bus/HOT Lane Study for the Lincoln Tunnel**

**What:** The Port Authority of New York and New Jersey (PANYNJ) is advancing this project to assess the feasibility of pricing a new managed lane intended to connect the New Jersey Turnpike and New Jersey highways to the Lincoln Tunnel and the Port Authority Bus Terminal in Midtown Manhattan.

The project will assess options of pricing the excess capacity of a second Bus Lane in a High-Occupancy Toll (HOT) Lane application. The objective of this project is to determine whether value pricing might be used to allow non-bus traffic to use the excess capacity of a potential second Exclusive Bus Lane on NJ Route 495 leading to the Lincoln Tunnel and Midtown Manhattan.

On weekdays from 6-10 a.m., the PANYNJ currently operates a 2.5-mile eastbound contra-flow Exclusive Bus Lane (XBL) along the westbound Route 495 approach to the Lincoln Tunnel from the New Jersey highway interchanges. Since the XBL has reached its capacity, the PANYNJ is assessing the physical and operational feasibility of adding a second priority bus lane to the corridor.

Where: PANYNJ's Lincoln Tunnel

**Project Update:** An interim report of these findings is in the final stages of development and will be available during the second Quarter of 2008.

08-06-08 Page 19 of 33

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<sup>\*</sup> Projects funded by the FHWA Value Pricing Pilot Program

**For More Information Contact:** Mark Muriello, PANYNJ, Assistant Director; Phone: (212) 435-4836; E-mail: mmuriello@panynj.gov.

#### NEW JERSEY: Upgrade of Electronic Toll Collection Technology in New York

**What:** The Port Authority of NY & NJ's (PANYNJ) implemented time-of-day pricing in March 2001 at the six tunnels and bridges that connect New Jersey and New York City. This project will undertake a technology and market assessment of equipment and systems that can accommodate cashless toll transactions at a level of accuracy that is currently provided by the existing cash and E-ZPass<sup>sm</sup> system; assess the operational challenges and financial risks of implementing such a system; and possibly determine the potential to deploy such a system in both the New York-bound and New Jersey-bound travel directions in order to facilitate more meaningful congestion charging rates and traffic management incentives in the current non-tolled direction

**Where:** The Port Authority of NY & NJ's (PANYNJ) six tunnels and bridges that connect New Jersey and New York City.

**Project Update:** Planning for the overall toll system replacement project was formally authorized by the PANYNJ Board on June 26, 2007.

**For More Information Contact:** Mark Muriello, PANYNJ, Assistant Director; Phone: (212) 435-4836; E-mail: <a href="mmuriello@panynj.gov">mmuriello@panynj.gov</a>.

#### PENNSYLVANIA: Variable Tolls on the Pennsylvania Turnpike

**What:** The project involved a study of the potential for value pricing strategies to alleviate congestion; to facilitate the timely, efficient, and economical movement of commercial vehicles to industrial and commercial destinations; and to improve the movement of daily commuter vehicles to and from the workplace.

Concurrent with the value pricing study, the Pennsylvania Turnpike Commission (PTC) implemented electronic toll collection (E-ZPass) for travel between the ticket interchanges on its mainline system.

Where: Pennsylvania Turnpike

**Study Completed:** The final report summary can be accessed from the FHWA Web site at: <u>Pennsylvania Turnpike Value Pricing Study</u>. Despite the prediction of favorable results the turnpike decided not to adopt variable tolls.

**For More Information Contact:** Robert J. Smith, Director of Finance, PA Turnpike, Phone: (717) 939-9551, extension 2432, E-mail: <a href="mailto:rsmith@paturnpike.com">rsmith@paturnpike.com</a>; or George L. Hannon, Special Assistant, PA Turnpike, Phone: (717) 939-9551, extension 5124, E-mail: <a href="mailto:ghannon@paturnpike.com">ghannon@paturnpike.com</a>.

# **TEXAS: Truck Traffic Diversion Using Variable Tolls in Austin**

**What:** This project will examine the use of value pricing to encourage truck traffic to divert from I-35 to a newly constructed, parallel toll facility (SH 130) using variable tolls on SH 130.. Additionally, the project will examine methods to encourage route and time-of-travel shifting.

TxDOT has contacted the American Trucking Associations and has developed a plan to involve the trucking community in the study. Additionally, the study will produce market research related to truck tolling from both international and U.S. trucking interests.

**Where:** I-35 in Austin, TX. When completed in 2007, Phase 1 of SH 130 will stretch from just north of Georgetown, Texas to US 183 near the Austin-Bergstrom International Airport. This 49-mile tolled

08-06-08 Page 20 of 33

highway will be a four-lane divided facility with major interchanges at I-35, US 79, SH 45 North, US 290 and SH 71. Subsequent phases of the project will connect the road to I-10 north of San Antonio.

For More Information Contact: David Powell, Texas Department of Transportation; E-mail: <a href="mailto:dpowell@dot.state.tx.us">dpowell@dot.state.tx.us</a>. Mark Burris, Ph.D., Texas Transportation Institute; Phone: (979) 845-9875; E-mail: <a href="mailto:MBurris@tamu.edu">MBurris@tamu.edu</a>. Tina S. Collier, Texas Transportation Institute; Phone: (512) 467-0946;

E-mail: <u>t-collier@tamu.edu</u>.

#### **USAGE-BASED VEHICLE CHARGES**

Usage-based vehicle charges include mileage-based charges for insurance, taxes, or leasing fees; and car sharing; Pay-As-You-Drive (PAYD) Automotive Insurance is a usage-based charge that converts automotive insurance from a fixed to a per mile cost, providing a financial incentive to drive less.

#### CALIFORNIA: Car Sharing in the City of San Francisco

**What:** City CarShare is the nation's only non-profit, fully automated car-sharing program. Its vehicles are located throughout the City of San Francisco, and coverage is expanding rapidly throughout the Bay Area. Project involves automated hourly neighborhood car rentals that substitute for car ownership. Under the Value Pricing Pilot Program, an evaluation of the impacts of car sharing on driving and congestion is underway in San Francisco.

Where: San Francisco Bay Area, California

**Study Completed:** Existing reports prepared by Prof. Robert Cervero are available on FHWA's Web site at: <u>USAGE-BASED VEHICLE CHARGES - CALIFORNIA: Car Sharing in the City of San</u> Francisco and select the project name. Final report by Dr. Cervero is expected soon.

**Findings:** Surveys of members and a comparable group of non-members (located in similar neighborhoods, but without convenient car sharing) suggest a decrease in driving from members, reduction in gasoline consumption and emissions, and sizable dollar and travel time savings, suggesting that cars were used to replace some of the least convenient off-peak transit trips. Future surveys will seek to identify how vehicle ownership and residential location choices, when combined with the availability of car sharing, affect travel patterns.

**For More Information Contact:** Rick Hutchinson, Executive Director; Phone: (415) 995-8588; E-mail: rick@citycarshare.org; www.citycarshare.org.

#### FLORIDA: Dynamically Priced Carsharing in Tampa

**What:** This project will test "congestion pricing" for carsharing vehicle usage, with differential pricing based upon both time-of-day/day of week and vehicle demand. Such pricing will be coupled with ridesharing promotions and incentives at the university, providing users more options besides driving a carsharing vehicle alone (e.g., finding a ride from someone who owns their own vehicle, sharing a carsharing vehicle, etc.) when congestion pricing for carsharing begins.

Where: Tampa, Florida area

**Project Update:** Contracts between FHWA, FDOT District 7 and the University of South Florida were finalized at the end of this quarter. The research team is developing methodology for the dynamic pricing structure and testing procedures for TRAC-IT.

For More Information Contact: Julie Bond, CUTR; Phone: (813) 974-9799; E-mail: bond@cutr.usf.edu.

08-06-08 Page 21 of 33

#### GEORGIA: Simulation of Pricing on Atlanta's Interstate System

**What:** This test will assess the effects of converting fixed automotive insurance costs into variable driving costs. The research is monitoring one full year of baseline travel activity for approximately 285 participating households.

In Phase II of the study, the impact of mileage-based insurance incentives will be examined. In Phase III, a simulated freeway congestion pricing scheme will be examined.

Where: Atlanta, Georgia area

**Method:** Approximately 500 vehicles in these households are equipped with instrumentation that monitors the second-by-second vehicle speed and position for every trip. Travel diaries and employer commute options surveys were also collected from each participating household and employer (as well as from a control group).

The research team will monitor the changes in driving patterns and will use statistical analyses of household characteristics, vehicle travel, and relevant employer survey data (parking costs, transit accessibility, etc.) to examine the relationships between the incentives offered and subsequent travel behavior changes. Phases II and III will provide extensive data for the first time on how commuters respond to various types of pricing policies. This will allow evaluation of the impacts of pricing policies on travel behavior, and will provide data from real-world experience to improve the ability of regional travel demand models to estimate the impacts of various types of pricing alternatives.

**Project Update:** Software problems caused some delay. Pricing should begin in March/April. Online electronic travel diaries are ready to implement and preliminary scheduling of post-study focus groups has been handled.

**For More Information Contact:** Randall Guensler, Georgia Institute of Technology; Phone: (404) 894-0405; E-mail: <a href="mailto:randall.guensler@ce.gatech.edu">randall.guensler@ce.gatech.edu</a>.

# \*MINNESOTA: Variabilization of Fixed Auto Costs

**What:** The Minnesota Department of Transportation and its consultant team led by Cambridge Systematics have completed a demonstration of how drivers change their travel behavior when some of the fixed costs of owning and operating a vehicle are converted to variable costs. The pilot project simulated conversion of vehicle lease and/or insurance pricing from traditional fixed payments to payments based on actual miles driven. This demonstration may help lease companies consider structuring incentives to reduce miles driven over the life of the lease, thus improving the resale value of vehicles, and may help insurance companies better understand the mileage-based insurance market.

Where: Minnesota

**Study Completed:** The study was completed in November 2005 and final analysis. In March of 2006, the consultant team submitted its recommendations. Project results will be posted on the research web site at the Minnesota Department of Transportation.

**Final Products:** The project advisory committee accepted the final reports. Part I is titled "Pay-As-You-Drive Experiment Finding" and Part II is titled "Potential Public Policy Implications of Pay-As-You-Drive Leasing and Insurance Products." In late March 2006, the results from the demonstration were reported to the Transportation Research Forum at New York University.

The complete final reports can be found on the web at:

http://www.lrrb.org/PDF/200639A.pdf (PDF, 1.6MB)

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08-06-08 Page 22 of 33

- http://www.lrrb.org/PDF/200639B.pdf (PDF, 509KB)
- http://www.lrrb.org/PDF/200639C.pdf (PDF, 228KB)

The reports are separated into experiment findings, market research, and policy implications

For More Information Contact: Kenneth R. Buckeye, Mn/DOT, Phone: (651) 296-1606, Fax: (651) 215-0443, E-mail: <a href="mailto:kenneth.buckeye@dot.state.mn.us">kenneth.buckeye@dot.state.mn.us</a>; Jeffrey Buxbaum, Cambridge Systematics, Inc., Phone: (617) 354-0167, E-mail: <a href="mailto:jbuxbaum@camsys.com">jbuxbaum@camsys.com</a>.

#### \*MINNESOTA: Mileage-Based User Fee Regional Outreach Statewide

**What:** This project is an effort to provide important input and enhance the national projects examining replacement for the motor fuel tax. This project proposes to do an assessment of public understanding of mileage-based road user charges through market research, outreach and education. Subsequently, this project will provide direct input into ongoing work looking at the motor fuel tax replacement and how the need for a new or replacement tax might be communicated.

Where: Minnesota

**Project Update:** Experts concluded that a mileage based user fee is a solution that will likely not be feasible for at least 10 years. If or when it is tested or implemented, it is imperative to clearly identify the objectives of the fee as a first step for determining structure/design of the concept and how to communicate to consumers. The adequacy of funding is a political issue and dependent on politicians' willingness to increase the fuel tax. Experts proposed that the strategy be used to supplement, rather than replace, the current motor fuel tax.

Focus groups revealed that the majority of the Minnesota public doesn't fully grasp the amount of tax dollars they spend per year on the transportation system, nor do they easily recognize the sources through which these monies come.

Drivers may be more accepting of a change in the funding method, whether simply an increase in the existing tax or a switch to a mileage-based user fee, if the reason for the change is clearly explained. They saw the general idea of a mileage-based user fee as a fair and reasonable way to tax, just as taxes for electricity and water. Mixed feelings existed, however, as to the need for more money for transportation in general, with a small portion convinced that funds were adequate but mismanaged. While varying the fee based on size and weight of the vehicle was seen as logical, some thought it would unfairly penalize those who have chosen to drive fuel efficient or hybrid vehicles. The congestion pricing model was seen as less fair as it negatively impacts those drivers who need to travel for work during standard "rush hours". There is an attitude that raising the motor fuel tax is the best/long term solution for transportation partially due the added costs of administration. The project team is now developing the subsequent phases of this work which will drill down into consumer attitudes through a qualitative research process to be followed with a customer survey.

**For More Information Contact:** Kenneth R. Buckeye, Program Manager Value Pricing; Phone: (651) 366-3737; E-mail: <a href="mailto:kenneth.buckeye@dot.state.mn.us">kenneth.buckeye@dot.state.mn.us</a>.

#### \*OREGON: Mileage-Based Road User Fee Evaluation

**What:** The Road User Fee Task Force (RUFTF) has examined various revenue raising alternatives for replacing the fuels tax as the primary source of revenues for Oregon's roads. The Legislature asked the task force to evaluate the potential of alternate strategies to replace the fuels tax, focusing in particular on technical strategies for implementing a mileage-based charge and congestion pricing.

Where: Portland, Oregon

08-06-08 Page 23 of 33

<sup>\*</sup> Projects funded by the FHWA Value Pricing Pilot Program

**Method:** The pilot test is designed to demonstrate the technical and administrative feasibility of implementing an electronic collection system for mileage-based user fees and congestion tolls. The on-board technology was demonstrated in May of 2004. Twenty trial vehicles were equipped with the on-board devices in the Fall of 2005. In the spring 2006, after verifying successful functionality, 260 trial participants in Portland, Oregon, had the on-board equipment added to their vehicles. For a period of one year, participants are paying distance charges rather than the fuels tax (when they fill up at the station, the fuels tax will be deducted from the bill and the mileage charge will be added).

**Project Completed**: The Oregon Department of Transportation released the final report for the Road User Fee Pilot Program on November 20, 2007. The report can be obtained at Oregon's Mileage Fee Concept and Road User Fee Pilot Program.

**For More Information Contact:** Mr. James M. Whitty; Phone: (503) 986-4284; E-Mail: <a href="mailto:jim.whitty@odot.state.us">jim.whitty@odot.state.us</a> or Betsy Imholt; Phone: (503) 986-4077; E-Mail: <a href="mailto:betsy.imholt@odot.state.or.us">betsy.imholt@odot.state.or.us</a>.

# \*WASHINGTON: Global Positioning System (GPS) Based Pricing in the Puget Sound Region What: GPS based pricing.

Where: Puget Sound region, Washington

**Method:** Meters were placed in the vehicles of voluntary participants. Different prices per mile were imposed depending upon the location and time of travel. Drivers were made aware of the pricing both though maps and other printed material, as well as a real-time read-out on the in-vehicle meter. At the start of the pilot, participants received a billing account with a positive cash balance. Any cumulative in-vehicle meter charges were debited against this balance. Any funds remaining in the account at the end of the pilot were kept by the participants. This "hold-harmless" study design gave participants the opportunity to participate without committing their own funds, yet also gave them the incentive to adjust their driving behavior so as to enjoy the surplus remaining in the account at the end of the experiment.

**Project Completed:** The Puget Sound Regional Council released the final report in April 2008. The report can be obtained at <u>Traffic Choices Study</u>. There was also a recent Seattle Times article on the project that can be obtained at <a href="http://seattletimes.nwsource.com/html/localnews/2004369904">http://seattletimes.nwsource.com/html/localnews/2004369904</a> tolls24m.html

**For More Information Contact:** Matthew Kitchen, Puget Sound Regional Council; 1011 Western Avenue, Suite 500, Seattle, Washington 98104-1035; Phone: (206) 464-6196; E-mail: mkitchen@psrc.org.

# \*WASHINGTON: Pay-As-You-Drive (PAYD) Insurance in Seattle

**What:** This study tests the Pay-as-you-drive (PAYD) insurance potential. The company will also recruit new participants to the PAYD pilot. Using the larger data base, they will identify the potential markets for mileage based insurance and, if feasible, implement the product at an earlier stage than originally planned. The PAYD pilot will also develop estimates of emissions reductions.

Where: King County, Washington

**Method:** This pilot will install the field-tested Intelligent Mechatronic Systems' iPAID global positioning system (GPS) mileage recording devices on a sample of approximately 5,000 vehicles,

08-06-08 Page 24 of 33

 $<sup>^{</sup>st}$  Projects funded by the FHWA Value Pricing Pilot Program

collect baseline data needed to model the options for a PAYD premium structure, select the best premium structure, and roll out and test it in the State of Washington. The study has both a pre-implementation and implementation phase.

Insurance company research partner, Unigard Insurance Group, will utilize both vehicle history data that provides odometer information and iPAID technology to verify odometer readings and examine driving behaviors from a data base of current insurance holders. Participants will receive discounts for participating in the PAYD pilot. The PAYD pilot will also examine pricing and billing models.

**Anticipated Completion Date: 2010** 

For More Information Contact: Bob Flor, King County; Phone: (206) 684-1611; E-mail:

bob.flor@metrokc.gov.

#### "CASH-OUT" STRATEGIES/PARKING PRICING

Parking Cash Out is a strategy that involves employers offering their employees the option of receiving taxable cash in lieu of free or subsidized parking provided by the employer. Employees may deny the cash and keep the tax-free parking subsidy or accept tax-free transit or vanpooling benefits in its place-with any balance in taxable cash. Car cash-out involves paying households to use one less car for a certain period of time. It helps people review their transportation choices and see how travel by foot, bicycle, transit, and ridesharing is competitive with the private automobile. The goal is to show people that they can save money and simplify their lives by not owning a second - or even first - car.

# CALIFORNIA: Car Share Innovations in the City of San Francisco

What: This project includes two distinct program elements:

- 1) "Unbundling Housing from Parking," where car-sharing vehicles will be placed in new housing developments allowing such developments to provide less parking and include more housing units, thus reducing housing costs; and
- 2) a pre-implementation "Integrated Car Sharing/Car Pooling System," where technologies will be explored to facilitate ridesharing among car-sharing participants, enabling them to reduce costs by sharing rides while car-sharing.

Where: San Francisco, California

**Anticipated Completion Date: 2010** 

**Project Update:** The City Carshare Team hired a contractor to assist with research and developing the' best practices guide'. In addition, the Team has been working with several developers who will offer unbundled parking so they can place vehicles and determine how to monitor data on usage. Finally, City Carshare is also talking with an affordable housing group to see how they can include these types of developments in our efforts.

**For More Information Contact:** Rick Hutchinson, City Carshare; Phone: (415) 995-8588 Extension 314; E-Mail: rick@citycarshare.org.

#### **CALIFORNIA: Smart Parking Initiative in San Diego**

**What:** This new project will build on the priced smart parking system tested at the Bay Area Rapid Transit (BART) system's Rockridge station. The team will test various parking management strategies, including real-time advanced traveler information about parking availability at stations throughout the system with integrated reservations capabilities, variable pricing based upon time of day and demand, and a unique credit-based pricing system (or transit fare discounts) that will reward station access by transit and carpool.

08-06-08 Page 25 of 33

Where: San Diego area

**Method:** Park-and-ride carpoolers will, in addition to sharing parking expenses among themselves and receiving additional financial rewards, be able to reserve priority parking spaces nearest the station platforms. Pricing will be used to achieve a targeted parking usage rate (e.g., 95% of capacity) at each station and to encourage station access by carpool and transit modes.

**Anticipated Completion Date: 2010** 

**Project Update:** The consultant team completed the installation of the parking system technologies and initial research observational assessment. Team will establish an existing conditions related report and will also serve as the platform for developing several parking management strategies composed of several operational suites, including: preferred parking for vanpool/carpool transit riders, limited/long-term operations, and pre-reservations and paid parking strategies.

**For More Information Contact:** Alex Estrella, San Diego Association of Governments; Phone: (619) 699-1928; E-Mail: <a href="mailto:aes@sandag.org">aes@sandag.org</a>.

# MINNESOTA: Parking Pricing Demonstration in the Twin Cities Area

**What:** The City of Minneapolis is currently undertaking a major downtown transportation study where parking will be an important consideration. The 18-month outreach program will include efforts tailored specifically to the media, local governments, and community leaders and will create a high level parking pricing task force. Demonstration sites will be selected and parking pricing will be implemented at these sites. A comprehensive evaluation will be performed.

Where: Minneapolis and St. Paul, Minnesota

**Method:** A variety of pricing innovations will be explored, as will integration with the I-394 MnPASS project and the University of Minnesota Metro Transit smart-card system.

**Project Update:** Background research was begun to examine the current state of parking in select locations in the Twin Cities. The team is identifying specific parking pricing demonstration projects including local government partners.

**For More Information Contact:** Kenneth R. Buckeye, Program Manager Value Pricing; Phone: (651) 366-3737; E-mail: <a href="mailto:kenneth.buckeye@dot.state.mn.us">kenneth.buckeye@dot.state.mn.us</a>.

#### \*WASHINGTON: Parking Cash-Out and Pricing in King County

**What:** project was designed to implement parking cash out and other parking management strategies in downtown high-rises in cooperation with building owners and employers. The purpose was to provide building owners or managers with incentives to shift existing parking supply to carpool, vanpool, or short-term parking; and to reduce the supply and increase the cost of single-occupant monthly vehicle parking. Unfortunately, a serious downturn in the Seattle economy stalled implementation.

Where: Downtown Seattle, Washington

**Study Completed 2004:** The final report can be accessed on the FHWA Highway Community Exchange Web site at: <a href="CASH OUT" STRATEGIES - WASHINGTON: Parking Cash Out">CASH OUT" STRATEGIES - WASHINGTON: Parking Cash Out</a>. There is currently a cash-out program marketed to employers in place in King County.

\* Projects funded by the FHWA Value Pricing Pilot Program

08-06-08 Page 26 of 33

**For More Information Contact:** Kathy Koss, King County Metro; Phone: (206) 684-1649, Fax: (206) 684-2058, E-mail: Kathy.Koss@metrokc.gov; 400 Yesler Way, M.S. YES-TR-0600, Seattle, Washington 98104.

# \*WASHINGTON: Cash-Out of Cars in King County

**What:** The *Way to Go, Seattle!* "One-Less-Car Demonstration Study" asked households to use one less car and keep daily records of how they got around.

Where: Seattle, Washington

**Method:** Households were provided with information on how much their car actually costs to own and operate, as well as information on how to get around by biking, riding transit, and walking. Participant households were provided with a weekly study stipend during the times they were not supposed to use their cars to simulate the financial savings they would realize if they were to actually sell one of their cars (the national average cost of owning/operating a second car is \$85 per week). Daily records, odometer readings, and anecdotal stories were analyzed to document costs and to understand whether or not households made significant behavior changes such as consolidating trips, carpooling, taking transit, biking, or walking.

**Web Site:** A web site describing the program as it is currently available to residents exists at: <a href="http://www.seattle.gov/waytogo/onelesscar.htm">http://www.seattle.gov/waytogo/onelesscar.htm</a>. The final report and replicability package for the demonstration project are also available at: <a href="http://www.seattle.gov/waytogo/waytogo.htm">http://www.seattle.gov/waytogo/waytogo.htm</a>.

**Study Completed:** The Final Report with stand-alone Executive Summary and Replicability Package is complete. Fifty CD-ROM copies of the Replicability Package disc were made and arrangements were also made to post all of the documents on the project web page (www.seattle.gov/waytogo).

A pilot version of the "One Less Car Challenge" was launched in September 2003. The Challenge was based on the results of the Demonstration Study that showed that many types of households from all over Seattle were able to reduce drive-alone car trips, and the accompanying mileage and emissions, when given information about 1) the availability of multi-modal transportation choices and 2) the actual costs of owning and operating their second (and in some cases their primary) car.

**Project Results:** The eighty-six participant households reduced total miles driven by 41,463, or an average of 1,974 miles not driven per week. Likewise, participants collectively saved a total of 8,003 fewer car trips, or an average of 381 fewer trips per week. Finally, the eighty-six households reduced total  $CO_2$  emissions by 30,198 pounds, or an average of 1,438 pounds per week. Additionally, 20 percent sold their "extra" car after participating in the study or during the selection process

**For More Information Contact:** Ms. Jemae Hoffman, Mobility Manager for the Policy, Planning, and Major Projects Division of Seattle Department of Transportation; Phone: (206) 684-8674; Fax: (206) 684-5180; E-mail: <a href="mailto:jemae.hoffman@seattle.gov">jemae.hoffman@seattle.gov</a> or visit <a href="www.seattle.gov/waytogo">www.seattle.gov/waytogo</a>.

#### **REGIONAL PRICING INITIATIVES**

Road pricing strategies that include comprehensive area, or region-wide applications that evaluate pricing's effect on reducing congestion, altering travel behavior, and encouraging the use of other transportation modes. Region-wide pricing applications that use technologies that provide drivers with real-time congestion and pricing information on alternative routes are especially encouraged.

08-06-08 Page 27 of 33

# CALIFORNIA: Investigation of Pricing Strategies in Santa Clara Valley

What: The study will provide an assessment of: (1) institutional, design and operational issues related to replacing general purpose freeway mainline and auxiliary lanes with priced managed lanes. and (2) benefits and costs associated with such replacements. It will also assess the benefits and costs of creating a system that integrates priced, managed lanes, freeway operations, and new transit services. Additionally, it will investigate the implementation of a credit-based congestion pricing approach involving both managed lanes and transit, and determine near-term implementation feasibility. The study will contribute to the development of a comprehensive multi-modal value pricing program that includes alternative transportation options.

Where: Santa Clara Valley, Northern California

**Anticipated Completion Date: 2010** 

**Project Update:** Valley Transportation Authority staff is in the process of preparing the work scope.

project schedule and budget to commence work.

For More Information Contact: Casey Emoto, Senior Transportation Engineer; Phone:

(408) 321-5564; E-mail: casey.emoto@vta.org.

#### FLORIDA: Sharing of Technology on Pricing

What: The Federal Highway Administration, the Organization for Economic Cooperation and Development (OECD), the Transportation Research Board (TRB), and the Florida Department of Transportation collaborated in sponsoring an international symposium to set the stage for consideration of wider implementation of innovative pricing strategies to meet congestion relief. emission reduction, and fiscal objectives. The symposium assembled key pricing experts from across the U.S. and overseas and provided a unique opportunity to synthesize the lessons learned about pricing policies throughout the world. It generated a greater understanding of economic, institutional, and administrative issues and concerns relating to pricing strategies, and is expected to provide invaluable impetus for broader consideration of value pricing strategies throughout the U.S.

It explored U.S. and international applications of road pricing strategies in different governmental and socio-economic settings. Case studies from the United States, Europe, and Asia were the principal focus of the symposium. An international group of participants discussed the rationale and motivations for implementing pricing; factors affecting the political and public acceptance of pricing strategies; the use of pricing revenues; and project outcomes. Drawing on papers, presentations, and symposium discussions, the TRB Steering committee evaluated the current state of practice, assessed future directions and opportunities, and identified research and information needs.

Where: Key Biscayne, Florida – November 19-22, 2003

Study Complete: The symposium was held in Key Biscayne, Florida on November 19-22, 2003. The final report can be accessed on FHWA's Highway Community Exchange Web site at: INTERNATIONAL SYMPOSIUM ON ROAD PRICING: Conference Proceedings.

08-06-08 Page 28 of 33

#### **ILLINOIS: Comprehensive Pricing in Northeast Illinois**

**What:** The project will evaluate the feasibility of reducing bottlenecks through a system of priced queue jumps and will assess resulting changes in travel times and delays on the region's expressways. The study will also assess the feasibility of better utilizing electronic toll collection and variable pricing mechanisms to reduce traffic congestion and access the potential of implementing pricing to increase the use of alternate travel modes and enhance the capacity on the region's expressway system.

Where: Illinois State

**Anticipated Completion Date: 2010** 

For More Information Contact: Mary Wells, Illinois State Toll Highway Authority; Phone:

(630) 241-6800 Extension 3902; E-mail: mwells@getipass.com.

#### **MARYLAND: Feasibility of Value Pricing**

What: The feasibility study will evaluate implementing HOT lanes on I-270 from I-495 (Capital

Beltway) to I-70 (Frederick County).

Where: on I-270 from I-495 (Capital Beltway) to I-70 (Frederick County).

**Anticipated Completion Date: 2007** 

**Project Update:** In 2008, the feasibility study continued assessing managed lanes on I-270 from the I-270/I-370 interchange in Gaithersburg to I-495 (Capital Beltway), and along I-495 to just north of the Dulles Toll Road in Virginia. The study limits connect the Intercounty Connector, a planned toll-lane facility between I-95 and I-270, with Virginia's I-495 HOT Lanes project.

**For More Information Contact:** Michael J. Haley, Chief of Regional & Intermodal Planning, Maryland State Highway Administration; Phone: (410) 545-5675 or 1-888-204-4828; E-mail: <a href="mailto:mhaley@sha.state.md.us">mhaley@sha.state.md.us</a>.

#### MINNESOTA: FAST Miles in the Twin Cities

What: This led to the implementation of I-394 MnPASS HOT lanes in May 2005.

Where: Minneapolis and St. Paul, Minnesota

**Method:** This project explores the political feasibility of an innovative pricing concept called "FAST Miles". Under the FAST Miles concept, each motorist is provided a number of dollar credits per month, analogous to the "free minutes" given by cell phone providers. The motorist, at his or her discretion, can apply those credits to use priced lanes. Once credits are exhausted, the motorist is charged the going rate to use the priced lanes, analogous to the process when a cell phone user consumes more than his or her allocated "free" minutes.

FAST Miles is designed to promote carpooling by allowing motorists to "pool" their credits. Should a commuter turn to public transportation, unused toll credits can be rebated through reduced vehicle registration fees or property taxes. In both cases, occupants of multiple occupancy vehicles are rewarded by improved access to free flowing traffic and lower use costs. The project will explore the feasibility of an innovative pricing concept to ease highway congestion on limited access facilities by promoting the use of car pools and public transportation.

**For More Information Contact:** Kenneth R. Buckeye, Program Manager Value Pricing; Phone: (651) 366-3737, E-mail: <a href="mailto:kenneth.buckeye@dot.state.mn.us">kenneth.buckeye@dot.state.mn.us</a>.

08-06-08 Page 29 of 33

#### \*MINNESOTA: Project Development Outreach and Education

**What:** The objective of this project is to develop local champions and educate the citizens of Minnesota to help bring about value pricing implementation projects in Minnesota. A visible group of local leaders will advocate value pricing in Minnesota and succeed in convincing doubters that pricing should be tested and implemented.

Where: Minnesota

**Method:** The University of Minnesota Humphrey Institute's project team will work with Mn/DOT Metro Division staff, Metropolitan Council transportation staff, and members of the Value Pricing Advisory Task Force to develop support for value pricing alternatives and specific projects. Specific activities will include examining the technical and political feasibility of alternative approaches, giving presentations to elected officials, transportation advocacy and other interest groups, and the formation of a local advocacy group for value pricing

**Study Completed:** The final report is available at Minnesota Value Pricing Outreach and Education (PDF, 17MB). The Humphrey Institute is now working with Mn/DOT and the Metropolitan Council on the next phase of value pricing outreach and education. This next phase focuses on how to integrate transit improvements into the current I-394 MnPASS project as well as Phase II of the I-394 project and future MnPASS corridors.

The Humphrey Institute continues to manage the Congestion Pricing (CON-PRIC) and Project Partners list serv, maintain the <a href="www.valuepricing.org">www.valuepricing.org</a> web site, and conduct national outreach and education activities on pricing through TRB annual and mid-summer meetings.

**For More Information Contact:** Lee Munnich, Sr. Fellow and Director, State and Local Policy; Phone: (612) 625-7357; Fax: (612) 626-9833; E-mail: <a href="mailto:Lmunnich@umn.edu">Lmunnich@umn.edu</a>.

# \*TEXAS: Regional Value Pricing Feasibility Study in Dallas

**What:** The 2005 Regional Value Pricing Corridor Evaluation and Feasibility Study is now complete. This study discusses the historical and current experiences of value pricing applications around the world. A guide as to how the Dallas-Fort Worth Region plans on evaluating candidate facilities for both short-term and long-term applications is detailed. The criteria developed were then applied to determine the selection of a demonstration project in the Dallas-Fort Worth Region. I-30/The Tom Landry Freeway between the Dallas CBD and Arlington, Texas to the west was selected as the demonstration project.

Where: Dallas - Fort Worth Region

**Study Completed:** The public can view and download this study from NCTCOG's Web site at 2005 Regional Value Pricing Corridor Evaluation and Feasibility Study.

**For More Information Contact:** Tim Young, North Central Texas Council of Governments; Phone: (817) 695-9288; E-mail: <a href="mailto:tyoung@nctcog.org">tyoung@nctcog.org</a>.

#### **TEXAS: HOT Lane Network Evaluation in Houston**

**What:** This project will examine Houston's six HOV lane facilities with a goal of developing a detailed implementation plan for a HOT lane network. This will include a plan to expand current HOT activities on the Katy and Northwest Freeways and add tolling to the other four HOV lanes to develop an integrated network of HOT lanes.

\* Projects funded by the FHWA Value Pricing Pilot Program

08-06-08 Page 30 of 33

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Where: Houston, Texas area

Anticipated Completion: August 2008

Project Update: Construction continues and toll operations are slated to begin in the late Summer or

early Fall of 2008.

**For More Information Contact:** David E. Fink, Texas Department of Transportation, 6922 Old Katy Road, Houston, Texas 77024; Phone: (713) 881-3063, E-mail: <a href="mailto:dfink1@houstontranstar.org">dfink1@houstontranstar.org</a> or Mark Burris, Texas Transportation Institute, Phone: (979) 845-9875, E-mail: <a href="mailto:Mburris@tamu.edu">Mburris@tamu.edu</a>.

# \*VIRGINIA: Regional Network of Value Priced Lanes

**What:** The National Capital Region Transportation Planning Board (TPB) is initiating a study evaluating a regional network of value priced lanes.

**Where:** Currently, the plan includes four new high-occupancy toll (HOT) lanes along 15 miles of the Capital Beltway in Virginia, and six new variably priced lanes along 18 miles on the Inter-County Connector in Maryland. It also includes a study of the conversion of existing HOV lanes into HOT lanes along 47 miles of the I-95/395 corridor in Virginia.

Anticipated Completion Date: September 2008

**Project Update:** The project team completed the study analysis and final report. The report was presented to the TPB's Task Force on Value Pricing in February and to the TPB in March. The final report, titled *Evaluating Alternative Scenarios for a Network of Variably Priced Highway Lanes in the Metropolitan Washington Region*, can be obtained by clicking on the following link: <a href="Evaluating Alternative Scenarios for a Network of Variably Priced Highway Lanes in the Metropolitan Washington Region">Evaluating Alternative Scenarios for a Network of Variably Priced Highway Lanes in the Metropolitan Washington Region</a>

**For more information contact:** Michael Eichler, National Capital Region Transportation Planning Board; Phone: (202) 962-3763, E-mail: meichler@mwcog.com.

# VIRGINIA: Value Pricing for the Hampton Roads Region

**What:** This study will focus a significant amount of effort in educating the public about pricing. The goal of the study is to ultimately lead to recommendations for potential implementation of value pricing concepts across the Northern Virginia metropolitan area and the Hampton Roads region. One of the goals is to assess how public perceptions and the potential level of support before and after conducting outreach and education related to potential tolling strategies.

Where: Hampton Roads Region, Virginia

**Anticipated Completion Date: 2007** 

**Project Completed:** VDOT is preparing the final report. For public outreach tools you can go to the following websites Downtown Tunnel/Midtown Tunnel/MLK Extension.

The <a href="http://www.virginiadot.org/info/congestion">http://www.virginiadot.org/info/congestion</a> pricing.asp webpage which contains all of the public outreach materials; a press kit; 2 different types of brochures for public distribution; a PowerPoint template for making presentations; a tri-fold display booth; and 2 banner-up displays.

\* Projects funded by the FHWA Value Pricing Pilot Program

08-06-08 Page 31 of 33

**For more information contact:** Marsha Fiol, Virginia Department of Transportation; Phone: (804) 786-2985; E-mail: Marsha.Fiol@VDOT.Virginia.gov.

### **WASHINGTON: Tolling Strategies in the Seattle Area**

**What:** WSDOT received 2006 funding to advance public awareness and acceptance of value pricing and associated operational toll concepts from a "user's perspective," incorporate previous study findings into near and mid term policies and project planning, and improve state and regional coordination. The project will communicate to the public and elected officials the concept of value pricing and how tolling can help manage traffic. The inability of public agencies to effectively communicate these concepts has hindered and delayed acceptance of pricing concepts.

Where: Seattle, Washington

**Anticipated Completion Date:** September 2009

**Project Update:** WSDOT and PSRC staff are working to develop of a survey to be fielded in the second guarter of 2008.

The pricing outreach work briefly described above is being coordinated with other pricing activities including conversion of the SR 167 HOV lanes to HOT. WSDOT's pricing work is also being coordinated with the update of Destination 2030, the region's Metropolitan Transportation Plan, currently being prepared by PSRC. That plan will include analysis of several roadway pricing alternatives.

**For More Information Contact:** Charles Prestrud, Urban Planning Office, Washington State DOT; Phone: (206) 464-1271; E-mail: <a href="mailto:PrestrC@wsdot.wa.gov">PrestrC@wsdot.wa.gov</a>.

# TRUCK ONLY TOLL FACILITIES

Truck only toll (TOT) lanes are highway lanes that are reserved for the use of commercial vehicles, primarily trucks and buses. Commercial vehicles can pay a fee to use the lanes if so desired, or they can continue to use the regular lanes. Further, fees are only charged when necessary to manage the performance of the lanes. TOT lanes can either be newly constructed facilities, or they can be created by reallocating the use of existing lanes. Similar in concept to HOT lanes, the pricing strategy for TOT lanes corresponds to a cost per mile that will keep the TOT lanes performing at a level of service that provides more reliable travel.

# CALIFORNIA: Analysis of Environmental Effects of PierPASS and Dedicated Truck Lanes in Southern California

**What:** This project will build off of existing analysis on the congestion reducing benefits of PierPASS by conducting a separate environmental analysis of the program. PierPASS provides off-peak truck discounts from the normal charges for accessing the Ports of Los Angeles and Long Beach.

Where: Ports of Los Angeles and Long Beach, California

**Method:** This project will look specifically at fleet composition and trucking movements, gather new data, and apply it to advanced emissions models in order to assess environmental effects. Study results will provide a comprehensive understanding of the environmental benefits of this project.

**Anticipated Completion Date: 2010** 

Project Update: The project was awarded funds in April 2007.

08-06-08 Page 32 of 33

**For More Information Contact:** Matthew Barth, Center for Environmental Research and Technology; Phone: (951) 781-5782; E-mail: barth@ee.ucr.edu.

#### **GEORGIA: Northwest Truck Tollway**

**What:** The study will examine a truck-only toll facility extending on Georgia State and interstate highways near Savannah, GA. The study will initiate a peer-to-peer exchange; conduct market research on the potential for truck-only toll facilities; develop additional data on truck travel; refine the travel model related to truck travel; examine options for selling additional capacity to other modes (single occupant vehicle, high occupant vehicle, transit, etc.); examine use of revenues and other activities.

Where: Georgia State Route 21 near I-95 to I-16 at the intersection of I-516 (Savannah, GA).

**Anticipated Completion Date: 2008** 

**Project Update:** An initial set of model runs and toll runs at various toll levels under different alignments has been completed. The toll structure has also been decided and will be tested for the development of a template for the model runs for each of the alternatives. The final alignments for the corridor for the portions that extend north to I-95 and I-516 have been determined. These alignments will assist in design cost estimates. Public involvement activities have been initiated to reflect the revised scope, which are to include a stakeholder roundtable and the conception of a strategy to market toll roads in the Savannah newspaper. The peer-to-peer exchange occurred in February and included meetings with SCAG, LAMTA, the Port of Long Beach/Los Angeles, PierPASS, and SR91 staff.

**For More Information Contact:** Patrick Vu, Senior Transportation Consultant, State Road Tollway Authority; Phone: (404) 893-6130; E-mail: <a href="mailto:patrickvu@georgiatolls.com">patrickvu@georgiatolls.com</a>.

08-06-08 Page 33 of 33